

Declaration may be prepared and circulated for public and agency review. This Determination may be found in Section 5 herein.

1.3 OVERVIEW OF THE INITIAL STUDY FINALIZATION PROCESS

Following completion of the Initial Study, the document, and its corresponding Subsequent Mitigated Negative Declaration (SMND), were circulated for public review and comment. The comment period extended from April 10, 2000 through May 19, 2000. The document and SMND were transmitted to responsible agencies, and made available to the public and other interested regulatory agencies via local libraries and the Internet. Following closure of the comment period, comments received were reviewed and responses developed. Per CEQA Guidelines Section 15132, the environmental review process for this Initial Study has been finalized via inclusion of (1) all comments received; (2) the CPUC's responses to these comments; and, (3) the text revisions necessary to reflect those comments that triggered a modification to the document.

Received comments and the CPUC's responses to them are provided herein as Appendix A. In some instances, received comments prompted the need to make revisions to the Initial Study and its Appendices. The responses to such comments note whether a change to the text has been made; text of the site-specific Initial Studies that have been modified are provided in Section 4.4 of this document. Changes to the text of this final Initial Study are indicated with a vertical line in the right-hand margin. This document is intended to be used in conjunction with the April 10, 2000 SMND and Initial Study for site specific detail and general reference.

2. PROJECT DESCRIPTION

This section provides an overview of the Level 3 Communications Infrastructure Project and its elements. The Final PEA, dated January 24, 2000 is herein cross-referenced as an additional source of information for project detail.

2.1 INTRODUCTION

Level (3)'s stated purpose for this project is to provide businesses and communities in California with expanded telecommunications services, and specifically provide end users with competitive price choices, faster and more reliable data transmission, and increased diversification to enhance Internet access, phone calls, taxes, and other telecommunication needs.

Level (3)'s design seeks to provide sufficient capacity, bandwidth, and speed to meet rapidly expanding consumer demand. The project will provide Gigabit Ethernet as a standard option for directly connecting customer server and network equipment. Interconnection of the California network with

Level (3)'s international network will build upon a combination of facilities-based and resold switches, interexchange points of presence, central offices, and gateways.

As previously described, Level (3) was granted authority by the CPUC in Decision 98-03-066 to provide telecommunications services in California. This original decision did not authorize construction of project elements outside existing utility ROW. Level (3) subsequently determined that such construction is required in some locations for Long-Haul cable placement or support facility development. Collectively, these off-ROW activities require supplemental environmental review and approval.

The types of off-ROW support facilities that are the subject of these Initial Study checklists are described below.

- In-Line Amplification Units (ILAs) - The technology used in Level (3)'s fiber optic network requires amplification of the light signal being transmitted through the fiber, approximately every 60 miles along the Long-Haul network. The proposed ILA units occupy approximately 3,000 square feet, with a total of approximately 5,000 square feet of total development at each site.
- Regeneration Units (3Rs) - A regeneration station is an integral part of a fiber network's operation. Regeneration is the process of re-shaping, re-timing, and re-modulating the optical signal. The resulting signal is filtered of noise and directed to the end destination along the fiber. The optical signal is converted to an electrical signal and then back to an optical signal through the 3R processing. Current technology limits the distance an optical signal can travel without going through a regeneration process to about 300 miles. The 3R station, which requires about 6,000 square feet of space, would be assembled at the site and contain equipment to regenerate the signals carried on the fiber optic network.
- Distribution Nodes (D-Nodes) - The Long-Haul fiber optic network is connected to local telecommunication systems through distribution nodes. A D-node facility size is about 20,000 square feet, subject to local building and zoning codes. The larger size of a node (compared to an ILA or 3R) allows the installation of additional hardware needed to connect the fiber optic network to local telecommunication systems. A particular D-Node will also perform the ILA or 3R function, depending on its location along the network.
- Terminals - A terminal, which typically marks the point where two segments of the running line come together, is designed to direct traffic (signals) to major distribution centers and elsewhere on the Level (3) network. These facilities are also designed to allow other telecommunication customers to co-locate within the facility. Depending on its location along the network, a terminal will also perform ILA, 3R, or D-Node functions.

In addition, two "Workarounds" have been proposed. These workarounds address fiber optic installation outside of the approved ROW in areas where space constraints or environmental resources prohibit installation within the approved ROW.

These project elements are necessary and sufficient to operate the system and meet existing and expected user demand. Any further construction or expansion of the network and associated support facilities is currently considered to be speculative due to the rapidly changing technology of the telecommunication industry, and is not the subject of this environmental review. The ultimate configuration of the project elements may vary because of site configuration, engineering constraints, or the presence of drainage concerns, natural resource concerns, wetlands, or cultural or historical resources. Because of their modular construction, huts can be added to ILA sites as service load increases and additional fiber optic cables are installed in unused ducts.

As currently proposed by Level (3), each ILA, 3R, Dnode, and Terminal will have the signal amplification and emergency generator capabilities needed to service a maximum of four fiber optic cables. Each 3R will have regeneration capabilities required to service up to four cables, as will those D-Nodes and terminals that also serve a 3R function based on their location along the network. Level (3) states that four fiber optic cables are sufficient to meet the identified needs of Level (3) and its lessees.

The Level 3 Communications Infrastructure Project includes the installation of 12 fiber ducts that could potentially carry fiber optic lines in the future; however, it is currently unknown if the additional capacity will be utilized. The proponent has opted to include the additional fiber optic cable capacity in this manner so that future installation of such cables will not require ground disturbance along the conduit ROW, thus avoiding future earth-disturbing and associated activities. Additionally, the incremental cost of installing empty conduit now is relatively small in comparison to doing so in the future. Level (3) may utilize this capacity in the future or may lease the capacity to other carriers. At this time, however, Level (3) has not stated any definite plans to use the additional capacity. Level (3) has noted that rapid technological development has already significantly increased the information capacity of a single line and may render the additional capacity unnecessary. It has additionally been noted by Level (3) that: (1) technological advances in fiber optic technology will minimize both the need for and size of future ancillary equipment and facilities such that it would be speculative to plan for them at this time; and, (2) the number and capacity of fiber optic cable systems being installed by other carriers makes the future market for additional fiber optic cables uncertain.

2.2 PROJECT LOCATION

As herein defined, a "location" is the general area or vicinity in which a network element is situated.

The locations of all of the 40 originally proposed elements supporting Level (3) Communications Infrastructure Project (including on-ROW stations) are provided in Figure 2 and Table 2-1. Three of these elements have been removed from the project's design. These elements are labeled as such in Figure 2 and Table 2-1, and are not included as part of this environmental review.

Of the 41 originally proposed network elements shown in Figure 2, 21 are located outside of ROW and not within existing telecommunications facilities. These 21 project elements include 19 station facilities and two Workarounds, which are addressed in detail in the site-specific checklists found in Appendix A of the Initial Study dated April 10, 2000. Thirteen (13) additional ILAs are located in existing utility ROW, and are briefly described in Appendix G of the Final PEA. The four Gateways will be co-located in existing telecommunications facilities and are also not within the scope of this supplemental environmental review.

Construction Workbooks are being developed to provide all CPUC-required information for these on-ROW ILAs to the construction. The Construction Action Lists (CALs) in the segment Line Books are also being updated to: (1) denote the locations of proposed on- and off-ROW facilities; (2) specify the permitting, monitoring, and mitigation requirements; and, (3) identify the need for CPUC approval prior to construction (e.g., the CAL inserts will be "gray" until approval is granted).

The "Map ID" numbers in Table 2-1 correspond to the identification numbers referenced in Figure 2. The project *off*-ROW elements are assigned MAP ID numbers 1-24, the on-ROW ILA sites are assigned MAP ID numbers 25-37, and the four Gateways are assigned MAP ID numbers 38-41. The right-hand column in Table-2-1 ("Initial Study Status") identifies the 21 project elements as "Included," the 13 on-ROW ILA sites as "Line Book," and the four Gateways as "Not Applicable." In Appendix A, of the Initial Study dated April 10, 2000 the number for each project element corresponds with the MAP ID number and identification number Table 2-1. As referenced in Section 1.1, the Irvine D-Node site (site 22) and the Gaviota and Refugio workarounds (sites 12 and 13, respectively) have been dropped from this environmental review. Consequently, there are no checklists in this document for sites 12, 13 and 22. However, to provide consistency between the checklists contained in the Initial Study dated April 10, 2000 and those found in the Final PEA, the original PEA numbering system has been maintained.

The five types of network support facilities (i.e., ILAs, 3Rs, D-Nodes, Terminals, and Gateways) are positioned along the network to perform functions necessary to provide integrated telecommunications services throughout the State of California, and to link California users with users across the nationally and internationally. Workarounds are located adjacent to the running line ROW in areas where engineering or environmental constraints required the running line to diverge from the existing utility ROW.

After traveling approximately 60 miles along the network, signals require amplification, a function performed by an ILA station. However, as the amplified signal travels along the fiber, it also becomes increasingly distorted due to splicing and imperfections in the fiber. After the fifth ILA in a series, the signal can no longer be amplified to maintain system standards. It must be re-generated, re-shaped, and re-timed at approximately 300-mile intervals, a function of a 3R station. A typical 3R facility also provides the signal amplification function of an ILA station. D-Nodes are required to distribute signal to customers. A D-Node and Terminal may also perform the ILA or 3R function depending on its relative location along the network. Similarly, Terminals may also incorporate D-Node capabilities as their position along the network may require. Thus, while an ILA *per se* may not exist at every 60-mile interval along the Long-Haul running line and a 3R *per se* may not exist at every 300-mile interval, their functions are accomplished at these intervals by other support facilities.

Table 2-2 provides a summary of characteristics for each of the 19 station facilities addressed in this environmental review. Information particularly important to assessing construction-related impacts includes the presence and usability of onsite buildings, the size of the area grading, and size of the primary structure. A detailed analysis of the potential impacts for each of the 19 station facilities and

the two Workarounds is provided in the CEQA Initial Study checklists provided in Appendix A of the Initial Study dated April 10, 2000.

Table 2-1 Long Haul Network Elements

Map ID	Route	Project Element	County	Address	Site Description	Initial Study Status
1	Homestead to Sacramento (WP04)	Tionesta 3R	Modoc	County Road 97	Undeveloped Land	Included
25		Burney ILA	Shasta	McCloud River Railroad ROW	ROW	Line Book
2		Palo Cedro ILA	Shasta	22020 Palo Way	Building Demolition	Included
3		Dibble Creek Workaround	Tehama	Near Red Bluff	Workaround	Included
4		Corning ILA	Tehama	702 2 nd Street	Building Demolition	Included
5		Colusa ILA	Colusa	210 10 th Street	Building Demolition	Included
6	Sacramento to Oakland (WS01)	Sacramento Terminal	Yolo	1075 Triangle Court	Existing Building	Included
7		Fairfield ILA	Solano	106 Railroad Avenue	Existing Building	Included
8		Emeryville ILA D-Node	Alameda	5000 Hollis Street	Existing Building	Included
38	WS03	San Francisco Gateway	San Francisco	185 Berry Street	Existing Facility	Not Applicable
39	San Jose to San Luis Obispo (WS05)	San Jose Gateway	Santa Clara	1280 Kiefer Road	Existing Facility	Not Applicable
26		San Martin ILA	Santa Clara	Union Pacific Railroad ROW	ROW	Line Book
27		Soledad ILA	Monterey	Union Pacific Railroad ROW	ROW	Line Book
9		San Ardo ILA	Monterey	Cattlemen Road at Short Street	Undeveloped Land	Included
10	San Luis Obispo to Los Angeles (WS06)	Cuesta Grade Workaround	San Luis Obispo	North of San Luis Obispo	Workaround	Included
11		San Luis Obispo 3R D-Node	San Luis Obispo	3550 Broad Street	Existing Building	Included
28		Whitehills ILA	Santa Barbara	Union Pacific Railroad ROW	ROW	Line Book
12		Gaviota Workaround	Santa Barbara	<i>(Site Removed from Project Design)</i>	Workaround	Not Included
13		Refugio Workaround	Santa Barbara	<i>(Site Removed from Project Design)</i>	Workaround	Not Included
14		Santa Barbara ILA	Santa Barbara	122 Helena Avenue	Existing Building	Included
15		Ventura ILA	Ventura	1667 Walter Street	Existing Building	Included
16		Moorpark ILA	Ventura	5245 Kazuko Court	Existing Building	Included
40		Los Angeles Gateway	Los Angeles	818 W. 7 th Street	Existing Facility	Not Applicable
17	Sacramento to Los Angeles (WS04)	Stockton ILA	San Joaquin	2079 Miner Avenue	Existing Building	Included
29		Kadota ILA	Merced	Burlington Northern Santa Fe Railway ROW	ROW	Line Book
18		Fresno 3R	Fresno	249 West Napa Avenue	Existing Building	Included
19		Hanford ILA	Kings	11090 10 ½ Avenue	Building Demolition	Included
30		Sandrini ILA	Kern	Burlington Northern Santa Fe Railway ROW	ROW	Line Book
20		Bakersfield ILA	Kern	7731 DiMiller Drive	Building Demolition	Included
31		Summit ILA	Kern	Union Pacific Railroad ROW	ROW	Line Book
32		Wash ILA	Los Angeles	Union Pacific Railroad ROW	ROW	Line Book
23	Los Angeles to San Diego (WD06)	Irvine D-Node	Orange	<i>(Site Removed from Project Design)</i>	Existing Building	Not Included
23		Corona ILA	Riverside	13601 Temescal Canyon Road (Lot 14) / 26335 Lester Circle (Lot 13)	Developed Land	Included
33		Escondido ILA	San Diego	Southern California Regional Rail Authority (Metrolink RR)	ROW	Line Book
41	San Diego to Yuma (WD04)	San Diego Gateway	San Diego	8929 Aero Drive	Existing Facility	Not Applicable
34		Live Oak Springs ILA	San Diego	Mountain Empire Electric Cooperative	ROW	Line Book
24		El Centro ILA	Imperial	1198/1202 Industry Way	Developed Land	Included
21	San Bernardino to Las Vegas (WD08)	San Bernardino Terminal	San Bernardino	North Industrial Parkway	Undeveloped Land	Included
35		Barstow ILA	San Bernardino	Boulder Utility Corridor	ROW	Line Book
36		Silver Lake ILA	San Bernardino	Boulder Utility Corridor	ROW	Line Book
37		Keaney Pass ILA	San Bernardino	Boulder Utility Corridor	ROW	Line Book

Placeholder for Table 2-2 Attributes of Each Project Facility Relevant to Impact Assessment

2.3 CONSTRUCTION AND OPERATION OVERVIEW

Section 8, Description of Facility, in each site-specific checklist of the Initial Study dated April 10, 2000 provides a summary description of the construction and operation activities associated with the subject project element. Impacts at Workarounds are primarily restricted to construction, as operations involve only periodic inspection/maintenance activities. For the 19 project elements (non-Workaround sites), impacts associated with both facility construction and operation must be assessed.

Construction Activities

Development of ILA, 3R, D-Node, and Terminal facilities may include some or all of the following, depending on the functions and characteristics of the particular site:

- Pre-construction surveys as required to mark environmentally sensitive resources for avoidance
- Site brush clearance and grubbing
- Building demolition and debris removal
- Grading
- Pouring of a foundation slab and driveway improvements
- Delivery of prefabricated building components
- Assembly of prefabricated structures or buildings
- Connection of the facility to the network (cable installation and hookup, see Workaround construction, following)
- Connection of utilities (electrical power, telephone, sewer and potable water)
- Installation of fencing
- Site finishing (e.g., landscape vegetation, architectural treatments).

Figures 3 and 4 of the project's Final PEA provide an artist's representation of a 4-hut ILA installation with generator shelter (sufficient to service four fiber optic cable fibers), and delivery of a single ILA hut to the construction site, respectively.

Off-site staging and parking will not be required at any of these facilities during either construction or operation phases.

Construction at Workarounds will involve the following:

- Pre-construction surveys to mark environmentally sensitive resources for avoidance
- Site brush clearance and grubbing
- Disturbing a section of earth, approximately 1 foot wide by 5 feet deep, by means of either plowing, trenching, or boring (maximum width of ground disturbance by vehicles is 20 feet) (see summary descriptions provided below)
- Inserting PVC innerducts within the trench while simultaneously backfilling the trench after the innerduct is installed
- Burying handhole structures to connect innerduct sections.

The following description of fiber optic construction methods for plowing, trenching and direction boring is from Appendix C of the Final PEA.

Direct burial cable plow technology uses a tracked bulldozer that is either pulling trailer-mounted cable reels or is fitted with a cable reel on the front end and a cable plow on the back end. In most areas, only one equipment pass through the area is necessary. The cable plow is a single, straight-shafted blade that opens a narrow trench about 12 inches wide and 5 feet deep. The innerduct is continually placed in the trench and as the plow moves ahead the trench closes in behind the plow. The plow leaves behind a small ridge of material approximately 12 inches above the original ground surface and a small open slot about 6 inches wide and 1 foot deep. As part of the cleanup process, the disturbed soil surface is restored (e.g., regraded to original slope) within two days and revegetated. In stable soils the machines leave a track in the vegetation similar to, but wider than, a road vehicle. In wet or soft conditions, this disturbance may be great enough to require more extensive grading and reseeding to restore the area.

A “spider” plow may be used when wet, soft or restricted areas are anticipated. The spider plow has been specially developed for these types of conditions and causes much less disturbance as it runs on oversize rubber tires and weighs less than a bulldozer. The plowing techniques are the same for the spider plow as for the bulldozer.

Open trench construction involves excavating a width of 12 inches and a cover depth of at least 42 inches. This type of construction is used in areas where soil and geologic conditions preclude the use of a cable plow. Although equipment may vary, it will include track hoes, rubber tire backhoes or chain trenchers. The innerduct is placed in the trench, and as the backhoe excavates ahead, excavated material is backfilled into the trench. Restoration will be completed within two days and includes placement of select, compacted fill utilizing existing excavated material, provided the material is free from rock and debris. The surface will be regraded to conform to surrounding contours and restored as appropriate.

A directional bore will be used to the extent possible to minimize impacts to sensitive environmental areas such as streams, wetland, sensitive species, or cultural resources. Directional boring is a state-of-the-art technology for placing underground cable where a surface-operated drilling device is angled into the ground from the surface and directed to its destination using a radio-controlled mole that contains a cutter head. Personnel, directing the mole on the ground, control the depth and direction of excavation. A plastic or steel sleeve is left in the ground through which the innerduct is later installed. Surfaces will be restored to original or better condition, once the innerduct is installed. Using this method, the innerduct can be directed under or around an obstacle without having to work in the sensitive area. This method can also be used to cross highways, rivers, wetlands, railroads, pipelines, and city streets.

Bentonite clay is mixed with water and is used as a lubricant in the boring process. It is possible for this mixture to seep to the surface through fractures in the ground. If seepage occurs it is most likely to be near the bore entry point, where the drill head is shallow, but it can occur anywhere along the bore alignment. The bores will be monitored by onsite inspectors and if seepage is found, boring will cease and corrective action will be taken. Containment will be accomplished using certified weed-free straw bales, earthen berms, sandbags, or pumps. These containment measures can be used on dry land or in stream channels. If the mixture reaches a stream or if it surfaces within the stream channel, certified weed-free straw bales or sandbags can be used to contain it so that the material can be pumped back to the bore site or into tanks.

On occasion, plowing, trenching and boring may not be possible because of the presence of rock or boulders. On these occasions, the work may be done using excavators. This may include the use of rock saws that cut a slot in the soil and/or rock. This approach requires excavation of a minimum of 18 inches below grade and 10 inches below the rock surface.

Table "X"-III-1 of each Initial Study checklist in Appendix A provides detailed quantitative and descriptive information on the construction and operation activities at each site, including the following:

- Equipment (e.g., graders, excavators, and water trucks) that will be used at the construction site. Included are the size [in gross horsepower (hp)] and number of units for each type of equipment, and the numbers of hours per day and days that each piece of equipment will operate
- Numbers of trips and one-way commuting distance (miles) that members of the construction crew will travel to the construction site
- Number of trips per day, total number of trips, and number of one-way miles traveled by material delivery vehicles (e.g., cement and gravel trucks)
- The amount of material (soil) that will be disturbed during cable placement operations at the proposed site.

Methods and specifications for construction of several categories of project elements are described in detail in Appendices C and D of the Final PEA. These construction techniques and standards have been designed to avoid or minimize potential environmental impacts. Technologically advanced equipment such as the "spider" plow (equipment with large, low-pressure tires,) and directional boring will be used whenever feasible. Section 2.5 describes the overall measures that will be implemented to avoid and minimize water quality impacts during construction. Appendix E of the Final PEA provides detail for these impact minimization measures.

Implementation of construction practices to minimize environmental impacts will be ensured by adoption, and subsequently monitoring, of the issue-specific environmental mitigation measures identified in the environmental review process. Site-specific mitigation measures recommended for construction are listed, by resource/issue area, in the Initial Study checklists provided in Appendix A.

The duration of construction for an ILA site is 30 to 45 working days, depending on the characteristics of the particular site and associated logistic considerations. The construction period for a 3R facility is approximately 24 weeks, while that for a D-Node or Terminal is approximately 28 weeks. Workaround construction will vary from several days to several weeks, depending on the length of the Workaround. Construction activities within an air basin will be sequenced, as necessary, to avoid significant air quality impacts, based on comparison of estimates' of district-total emissions to conservative thresholds (see Section III of the Appendix A checklists).

A precise construction start date and schedule cannot be determined until after approval of the proposed actions by the CPUC. However, Level (3) has targeted a construction completion date for both routes between Sacramento and Los Angeles by the end of the year 2000. Construction schedules are provided in Level (3)'s Quarterly Reports to CPUC, as well as in the segment Line Books.

Operation Activities

The ILA, 3R, and D-node sites that perform ILA functions (i.e., ILA D-Nodes) will not be permanently staffed. Operational impacts will be associated with site visits for data logging and maintenance which will occur approximately once per week, and the weekly automated testing of emergency generators (which does not require a site visit). The 3R D-nodes (i.e., those D-Nodes that also perform the 3R function) and Terminals will be permanently staffed (three individuals each). Operational impacts at these sites will be associated with daily commutes, use of the facility, and automatic emergency generator testing.

Table "X"-III-1, Air Quality Calculations, of each Initial Study checklist provides detailed quantitative and descriptive information on the operational activities at each site, including the following:

- Size/gross horsepower of the standby generator and its duration of activity
- Number and distances of vehicular trips to the site associated with site operation, maintenance, and data logging.

Except for the periodic inspection visits, there are no operation activities associated with the Workarounds.

2.4 REQUIRED PERMITS AND APPROVALS

Consistent with the environmental mitigation measures identified in Negative Declaration IX, all necessary local, state, or federal permits, and approvals will be obtained for each ILA, 3R, D-node, Terminal, and Workaround. These permits and approvals are discussed in each of the site-specific checklists under Item 10 ("Other Agencies Whose Approval Is Required"), as well as under each of the resource-specific impact assessment categories.

2.5 APPLICANT-PROPOSED MITIGATION

Level (3) has committed to avoiding or reducing to less-than-significant levels any potentially significant environmental impacts resulting from off-ROW work activities. This goal will be met through implementation of Level (3)'s Environmental Commitments (based on the Mitigation Measures in the Negative Declaration IX and other environmental reviews and approvals), Level (3)'s corporate policies on environmental protection and safety, and any additional requirements that CPUC may impose. These commitments and corporate policies are addressed following. Level (3) continues to file its Quarterly Reports as required by the CPCN, and will integrate the project elements into this reporting process once the CPCN is modified.

Environmental Commitments

Level (3) has incorporated all of the mitigation measures specified in Negative Declaration IX, as well as additional appropriate measures, into the planning, design, construction, and operation of the project elements that are the subject of this environmental review. Therefore, all actions previously identified as mitigation measures for ROW network construction and operation are now part of Level (3)'s Environmental Commitments for off-ROW activities. These Environmental Commitments include:

- Measures to avoid or minimize potential impacts to various resources
- Commitment to obtain all approvals and permits required for construction and operation of the project
- Coordination and/or consultation with local and resource management agencies
- Notifications to adjacent property owners
- Coordination with other utility projects in the area
- Documentation and reporting of compliance measures.

Site-specific details regarding Level (3)'s Environmental Commitments are found in each of the site-specific checklists provided in Appendix A of the Initial Study dated April 10, 2000. The site-specific actions proposed in these checklists are necessarily preliminary and subject to final agreement by authorizing agencies and permit conditions which may be imposed at the local level.

Level (3) Corporate Policies and Approach to Environmental Quality

In addition to Level (3)'s Environmental Commitments, the project incorporates Level (3)'s corporate policies and procedures on environmental quality as standard measures in project design, construction, and operation.

Level (3) has issued an "Environmental/Cultural Resources Philosophy" statement that defines what Level (3) expects from its employees and contractors. The statement promotes employee and contractor awareness of the company's goal to comply with the conditions of its CPCN and permits and thus protect the long-term quality of the environment wherever it constructs. Native American monitors, archaeologists, endangered species specialists, and environmental inspectors currently

provide oversight during Long-Haul construction, and are expected to do the same for off-ROW construction.

Level (3)'s multidisciplinary team of in-house environmental specialists communicates the company's commitment to compliance with the conditions of its CPCN and various permits, and ensures that all contractors are aware of the adverse impact that non-compliance could have on both the environment and the construction schedule.

Level (3)'s commitment to protecting the quality of the environment includes, but is not limited to:

- Utilizing a contractor experienced with California's environmental policies, laws, and regulations, as its construction contractor. The construction contractor then hired a national engineering firm with a strong presence in California to manage the acquisition of the needed permits by subcontractors
- Training the construction managers and crews and providing guidance to construction managers and crews via permit workbooks
- Employing a site selection process that emphasized environmental protection over cost, and was successful in siting all facilities on developed and/or disturbed properties
- Implementing state-of-the-art and costly "environmentally-friendly" construction methods to avoid or minimize impacts to sensitive or regulated areas. Such methods include, but are not limited to:
 - Boring under streams and sensitive resource areas instead of plowing through them
 - Employing "spider" plows that leave a smaller "footprint" in sensitive areas
 - Putting larger tires on vehicles to reduce soil disturbance and compaction
- Requiring construction contractors and subcontractors to define and implement very aggressive safety and environmental protection programs
- Employing experienced environmental inspectors for each construction segment who take the lead for their respective segment-specific environmental teams in ensuring compliance with the CPCN Decision and permit conditions
- Actively seeking opportunities to participate in "joint-build" opportunities in order to reduce costs and minimize environmental impacts.

2.6 CONSTRUCTION MONITORING AND COMPLIANCE PROGRAM

The project includes a construction monitoring and compliance program, which includes third-party monitors under the CPUC's direction, that is designed to ensure that construction-related activities adhere to the conditions of approval stipulated by the CPUC. Additionally, the program is designed to: (1) minimize project-related disturbances to sensitive environmental resources; and, (2) identify and resolve issues of environmental concern that may occur during construction. Key elements of the program are summarized below.

Construction Work and Line Books

Multiple construction crews, and their subcontractors, are simultaneously conducting construction of the project across ten portions (segments) of the innerduct ROW. Level (3) is employing a “design-build” approach to construction, under which detailed design and permitting for construction of each segment are finalized shortly before construction is scheduled to commence. In preparing for construction, a series of “Line Books” are prepared for each ROW segment; similarly, a series of “Work Books” are prepared for element-specific support facility (i.e., ILA stations, DNodes, Terminals). The Line and Work Books contain the following information:

- Construction-related project organization and personnel contact points
- ROW segment/support facility project description and access
- Environmental permitting and monitoring requirements
- Permit agreements and conditions
- Site-specific technical reports, including, as appropriate, inventories of sensitive environmental resources
- Construction worker responsibilities and direction for environmental compliance
- A Storm Water Pollution Prevention Plan and soil erosion and sedimentation control measures
- A Spill Prevention, Control, and Countermeasure Plan
- The CPUC mitigation monitoring table of Negative Declaration IX (discussed below).

The Line and Work Books additionally contain construction drawings and maps of site surveys. Following completion of the Work and Line Books, the CPUC’s environmental monitors (described below) review the information for adequacy. Based on this review, either additional information is requested of Level (3), or a recommendation for a Notice to Proceed (NTP) is prepared and forwarded to the CPUC for approval.

Construction Monitoring, Compliance and Compliance Plans

Construction activities of the approved project are being monitored by one to two Environmental Monitors (EMs) per segment; the number of EMs assigned to a segment is dependent on its length. The EM program is under the direction of the CPUC, and functions independently of Level (3). As specified by the CPUC, the EMs are present during construction one to two days per week, per segment, on a random basis; the hours of monitoring per week is dependent on the volume of construction activity. In addition, the EMs are present one day per week at each of the on-ROW support facility sites, and will similarly monitor the off-ROW project elements addressed in this document. The role of the EMs is to observe and inspect permitting and construction activities to ensure that such activities are being conducted in accordance with the Mitigation Monitoring Plan (described below) adopted by the CPUC in granting Level (3) its CPCN.

Non-compliance activities are documented in the form of Project Memoranda (which serve as a warning) and Non-Compliance Reports. Repeated non-compliance activities serve as the grounds for a construction shutdown, if deemed appropriate by the CPUC. Construction shutdowns can be either site specific, segment wide, or statewide.

Non-compliance activities to date have generated the need for the development of additional Compliance Plans by Level (3). Examples include a Cultural Resources Procedures Plan; a Frac-Out Contingency Plan; and, a Hazardous Materials Handling Plan (currently pending). The Frac-Out Contingency Plan addresses the containment and cleanup of bore drilling fluids that periodically migrate to the surface through fractures in the ground. As part of their monitoring role, the EMs monitor implementation of all Compliance Plans developed for the project.

Weekly Reports are prepared to document and summarize field monitoring and construction activities. The issuance of Project Memoranda and Non-Compliance Reports, the status of Notices to Proceed, and requests for variances and Temporary Extra Work Spaces (TEWS), described below, are also presented in the Weekly Report. In addition, a weekly conference call is held with Level (3) to address problems and issues summarized in the Weekly Reports. Monthly meetings with Level (3), the CPUC and the CPUC monitoring team management are also conducted to review non-compliance trends/patterns and resolve outstanding issues of concern. EM meetings are also periodically conducted to facilitate monitoring coordination and consistency for the project as a whole.

Variations and Temporary Extra Work Space (TEWS)

Variance Requests are submitted to the CPUC by Level (3) for any proposed action that would change either: the approved ROW alignment (or portion thereof); approved construction techniques (for example, trenching instead of boring a river crossing); the CPUC adopted mitigation measures; or the configuration, placement, or, size of permanent work space areas. TEWS are periodically requested by Level (3) for additional work space during construction. Proposed TEWS areas cannot contain any sensitive biological or cultural resources, nor affect any sensitive land uses adjacent to or on the site. The TEWS approvals are effective for 30-days.

Variance Requests are reviewed by the EMs to determine if the proposed change will either generate new significant impacts, or increase existing impact levels. Variance Requests are also field-validated by the EMs. Based on the review of each Variance Request, additional information is either requested of Level (3), or a recommended approval/denial letter is prepared and forwarded to the CPUC for consideration and issuance. Approval letters, in most cases, include additional conditions to ensure that no increase in significant impacts, nor new significant impacts, occurs.

Mitigation Monitoring Plan

Approval of the original project under Negative Declaration IX required CPUC adoption of a Mitigation Monitoring Plan. The Plan includes discussions regarding:

- The CPUC's role and responsibility
- The purpose of the Plan

- A summary project description
- Project party roles and responsibilities
- A dispute resolution process
- A description of the project's Mitigation Monitoring Program, including a requirement for Level (3) to file a quarterly compliance report with the CPUC, and the stipulation that any proposed project actions located outside of approved utility ROW must be filed with the CPUC for CPCN modification.

In addition to the above, the Plan provides a table of the CPUC adopted mitigation measures for the project on a resources/issue-specific basis. The mitigation measures of Negative Declaration IX are provided in the Introduction of the SMND preceding this Project Overview. A Mitigation Monitoring Plan for the mitigation measures recommended as part of this environmental review is provided as Appendix B.

3. ENVIRONMENTAL SETTING

Section 9 of the Initial Study checklists, "Surrounding Land Uses and Environmental Setting," provides a brief description of each site's physical attributes; each checklist additionally includes a site vicinity map for reference. Resource-specific descriptions of each site are provided in the "Setting" discussion that introduces each resource/issue area evaluated. In total, 16 resource/issue-specific categories are assessed in the checklists. Where appropriate, the resource-specific settings are supported by graphics. A broad summary of the resource-specific settings for the proposed off-ROW elements is provided in the master Initial Study checklist found in Section 4.3 of this document.

The 13 on-ROW ILA sites are briefly described in Appendix G of the Final PEA, including generic designs for the 3000- and 5000-square foot ILA facilities.

4. ENVIRONMENTAL IMPACT ASSESSMENT SUMMARY

A detailed assessment of the potential impacts associated with each project element was conducted by addressing each of the 86 questions contained in the Initial Study checklist. A summary of all of the checklists is provided in the project's master checklist (Section 4.3). The impact assessment incorporates previously identified mitigation measures required by the CPUC Negative Declaration IX, Level (3)'s Environmental Commitments, which include the mitigation required by the Level (3) CPCN Decision (Appendix B of the Final PEA), and other mitigation measures considered prudent to minimize impacts to the maximum extent feasible.

4.1 IMPACT ASSESSMENT METHODOLOGY

Initial Study

Assessment of the potential impacts associated with the proposed actions was primarily based upon technical review and evaluation of the checklists presented in Appendix A of the Final PEA. In those